	TATION/MACDII		,	1. CONTRACT	ID CODE	PAGE OF PAGES
AMENDMENT OF SOLICI	I A I ION/MODII	TICATION OF CONTRACT				1 23
2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.		•	5. PROJE	CTNO.(Ifapplicable)
0001	03-Nov-2008					
6. ISSUED BY CODE	W917PM	7. ADMINISTERED BY (Ifother than item6)		COI	DE	
AFGHANISTAN ENGINEER DISTRICT US ARMY CORPS OF ENGINEERS KABUL APO AE 09356		See Item 6				
8. NAME AND ADDRESS OF CONTRACTO	R (No., Street, County,	State and Zip Code)	Х	9A. AMENDM W917PM-09-R-	ENT OF 0005	SOLICITATION NO.
			Х	9B. DATED (SI 10-Oct-2008	EE ITEM	[11)
				10A. MOD. OF	CONTR	ACT/ORDER NO.
CODE	FACILITY CO	DE		10B. DATED (SEE ITE	M 13)
		APPLIES TO AMENDMENTS OF SOLI	CIT	ATIONS		
X The above numbered solicitation is amended as set	orth in Item 14. The hour and	date specified for receipt of Offer		is extended,	χ is not e	extended.
Offer must acknowledge receipt of this amendment (a) By completing Items 8 and 15, and returning or (c) By separate letter or telegramwhich includes RECEIVED AT THE PLACE DESIGNATED FOR REJECTION OF YOUR OFFER. If by virtue of thi provided each telegramor letter makes reference to	copies of the amendme a reference to the solicitation THE RECEIPT OF OFFERS s amendment you desire to ch he solicitation and this amen	nt; (b) By acknowledging receipt of this amendm and amendment numbers. FAILURE OF YOUR PRIOR TO THE HOUR AND DATE SPECIFIED ange an offer already submitted, such change may	nent or ACK! D MA be ma	each copy of the of NOWLEDGMENT Y RESULT IN de by telegramor let	ТО ВЕ	d;
12. ACCOUNTING AND APPROPRIATION	DATA (If required)					
		TO MODIFICATIONS OF CONTRACT CT/ORDER NO. AS DESCRIBED IN IT				
A. THIS CHANGE ORDER IS ISSUED PUI CONTRACT ORDER NO. IN ITEM 10		authority) THE CHANGES SET FORTH	I IN I	TEM 14 ARE N	MADE IN	ТНЕ
	RTH IN ITEM 14, PUR	SUANT TO THE AUTHORITY OF FA			as change	s in paying
C. THIS SUPPLEMENT AL AGREEMENT	IS ENTERED INTO P	URSUANT TO AUTHORITY OF:				
D. OTHER (Specify type of modification a	nd authority)					
E. IMPORTANT: Contractor is not,	is required to sign	gn this document and return	cop	pies to the issuing	g office.	
DESCRIPTION OF AMENDMENT/MOD where feasible.) The purpose of this amendment is to: Replay VISIT of Section 00110. Please Note: Only	ce Sections 00010, 010	010 and add Site Visit to paragraph 3. F	PREP	ROPOSAL CON		
All other terms and conditions remain uncha			u 0			
Except as provided herein, all terms and conditions of th	e document refèrenced in Item	19A or 10A, as heretofore changed, remains uncha	anged	and in full force and	effect.	
15A. NAME AND TITLE OF SIGNER (Type	or print)	16A. NAME AND TITLE OF CO	ONT	RACT ING OFFI	CER (Ty	pe or print)
		TEL:		EMAIL:		
15B. CONT RACT OR/OFFEROR	15C. DATE SIGNE	D 16B. UNITED STATES OF AME	RICA	A		16C. DATE SIGNED
		BY				03-Nov-2008
(Signature of person authorized to sign)		(Signature of Contracting Of	ffice	·)		

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

SUMMARY OF CHANGES

SECTION 00010 - SOLICITATION CONTRACT FORM

The following have been added by full text: SOLICITATION CONTRACT FORM

SECTION 00010

PROPOSAL SCHEDULE - Jalalabad Range

The Contractor shall provide a price for all items, including those labeled, "Optional Items." The Government will evaluate the Contractor's entire proposal to determine which CLINs represent the best value to the Government.

No. Description	Qty	Unit	Unit Price	Total Amount
0001 Base Proposal:				
0001 DESIGN:				
0001A Design Costs:	1	LS		\$
0002 Mobilization Costs	1	LS		\$
0003 De-Mobilization Costs	1	LS		\$
0004 Preparation of As Builts	1	LS		\$
0005 SITE IMPROVEMENTS:				
0005A Demolition & Site Grading	1	LS		\$
0005B Rifle Range	1	LS		\$
0005C Pistol Range	1	LS		\$
0005D Heavy Machine Gun Range	1	LS		\$
0005E RPG/SPG Range	1	LS		\$
0005F Mortar Range	1	LS		\$
0005G Hand Grenade Familiarization Range	1	LS		\$
0005H Fire and Movement Range	1	LS		\$
0005I Urban Assault Course	1	LS		\$

0005J UXO Demolition Area	1	LS		\$	
0005K Gravel Roads, sidewalks, parking	20,000	M^2	\$	\$	
0005L Site Electrical Distribution System	1	LS		\$	
0005M Non-potable Water System	1	LS		\$	
0005N Sewer Collection System	1	LS		\$	
0005O Fencing and Entrance Gate 0005P Covered Bleachers	10,800 8	M EA	\$ \$	\$ \$	
Sub-Total Site Improvements only				\$	
0006 BUILDINGS:					
0006A Permanent Latrine Facility	3	LS		\$	
0006B Weapon Breakdown/Ammunition Dist Bldg	8	LS		\$	
0006C Covered Mess	8	EA	\$	\$	
0006D Observation Tower	8	EA	\$	\$	
0006E Security Detail Office Building	1	LS		\$	
0006F Guard Shack	1	LS		\$	
0006G Utility & Storage Building	1	LS		\$	
0006H Trash Point	1	LS		\$	
Sub-Total Buildings only				\$	
0007 DBA INSURANCE:					
0007A DBA Insurance	1	LS		\$	
TOTAL BASE PROPOSAL ITEMS \$ (total of all above costs - includes design and construction)					
0008 OPTIONS					
0008A Classroom	1	LS		\$	
0008B Lighting on roads and range areas	1	LS		\$	
0008C Gravel Access Roads	10,000	M^2	\$	\$	

0008D Gravel Range Perimeter Roads	50,000	M^2	\$ \$
0008E Chlorination System	1	LS	\$
0008F Electrical Utility Connection to ANA Base	1	LS	\$
0008G Infantry Squad Battle Course	1	LS	\$
TOTAL OPTION PROPOSAL ITEMS	\$		
TOTAL BASE and OPTION PROPOSAL ITEMS			\$

PROPOSAL SCHEDULE NOTES

- 1. Offeror shall submit prices on all items.
- Only one contract for the entire schedule will be awarded under this solicitation. This project will be awarded as a lump sum contract. This Proposal Schedule is an accounting tool for allocating funds to applicable budget.
- 3. Costs associated with this project shall include design and construction costs for site, facilities and utilities preparation but, no less than all items as shown in proposal schedule.
- 4. DESIGN COSTS DEFINITION: Design costs shall consist of preparation of master planning and site designs, plans, drawings, and specifications.
- 5. NON-DESIGN COSTS DEFINITION: Non-design costs shall include the following: initial site visits; field, topographic, property, boundary, utility, and right-of-way surveys; subsurface explorations and borings; feasibility, functional, and economic studies and other investigations; flow gauging and model testing; preparation or verification of as-built drawings; preparation of general and development criteria; preparation of general and feature design memoranda; services of consultants where not specifically applied to the preparation of working drawings or specifications; construction phase services; models, renderings, or photographs of completed designs; reproduction of designs for review purposes; and travel and per diem allowances in connection with the above excludable services.
- SEPARATION OF WORK: All work for Design and Construction shall be included in all Proposal Items.
- 7. EVALUATION OF OPTIONS: The award will be made to the offeror whose proposal represents the best overall value to the Government. For pricing purposes the Government will evaluate both the Base Proposals and Option Proposals. The Government is not obligated to exercise the options.
- 8. EXERCISE OF OPTIONAL BID ITEMS: Optional bid items (if any) may, at the option of the Government, be added to the contract at any time within 90 calendar days after award of Base Proposal.

-- END OF SECTION --

SECTION 00100 - BIDDING SCHEDULE/INSTRUCTIONS TO BIDDERS

The following have been added by full text:

BID SCHEDULE/INSTRUCTIONS

BID SCHEDULE/INSTRUCTIONS

SECTION 00110

ANA SITE-ADAPT DESIGN-BUILD

LOW-PRICED, TECHNICALLY ACCEPTABLE

PROPOSAL PREPARATION

1. INQUIRIES

Perspective offerors should submit inquiries related to this solicitation by writing or calling the following (collect calls will not be accepted):

All questions will be submitted in writing by letter or e-mail to:

U.S. Army Corps of Engineers (USACE) Afghanistan Engineer District (AED) Qalaa House, Attention: Daniel D. Miller Kabul, Afghanistan

E-MAIL ADDRESS: Daniel.d.miller2@usace.army.mil

Please include the solicitation number, and project title with your questions. Written inquiries must be received by this office not later than 4 calendar days prior to the date set for receipt of offers.

Oral explanations or instructions are not binding. Any information given to an offeror which impacts the solicitation and/or offer will be given in the form of a written amendment to the solicitation

As this is a competitive negotiation acquisition, there is no public bid opening and no information will be given out as to the number of offerors or the results of the competition until all awards are made

2. DIRECTIONS FOR SUBMITTING PROPOSALS

Offers must be in sealed envelopes/packages, marked and addressed as follows:

MARK PACKAGES:

Solicitation No. W917PM-09-R-0005 Offer Closing Date: 11/25/2008 Offer Closing Time: 5:00 PM (LOCAL KABUL TIME)

ADDRESS PACKAGES TO:

U.S. Army Corps of Engineers (USACE) Afghanistan Engineer District (AED) Qalaa House, Attention: Daniel D. Miller Kabul, Afghanistan

Special Instruction Pertaining to Hand Carried Offers: Hand-carried offers must be delivered to the USACE AED offices, Qalaa House, Kabul, Afghanistan. Offers who desire to hand-deliver their offers notify the Contract Specialist in advance in order to be met at the entrance gate to Qalaa House Compound.

3. PREPROPOSAL CONFERENCE / SITE VISIT

A Pre-proposal Conference will be held on 27 October 2008, 9:00 AM Kabul time, at U. S. Army Corps of Engineers, House #1, Street #1, West Wazir Akbar Khan (behind Amani High School), Kabul, Afghanistan. Attendees will be limited to one (1) representative per company only. Each representative is required to show a picture identification to be allowed access to the compound. Interested companies are required to e-mail: william.d.mullery@usace.army.mil, with the name of their representative by 10:00 AM, 25 October 2008. Company representatives whose names are not on the list will not be allowed access to the compound.

Directions for the MeS Site Visit:

The pre-proposal site visit for the ANA Training Range will be conducted on 6 November. Attendees should meet Ms. Krueger, Corps of Engineers Resident Engineer, at 10:00 AM at her office. Ms. Krueger can be reached at the following cell phone number 079-981-6258. Ms. Krueger should be met at the Corps of Engineers office, Camp Shaheen, Mazar-e Sharif. The access map to the Corps of Engineers office is attached.

IMPORTANT NOTES. (1) Remarks and explanations addressed during the conference shall not qualify or alter the terms and conditions of the solicitation. (2) The terms and conditions of the solicitation remain unchanged unless the solicitation is formally amended in writing.

4. TELEGRAPHIC OFFERS - - TELEGRAPHIC OFFERS ARE NOT ACCEPTABLE.

However, offers may be withdrawn by written or telegraphic notice. Any telegram to withdraw an offer sent to this office must be received in the office designated in the Request for Proposal (RFP) for receipt of offers not later than the exact date and time set for receipt of proposals. A telegraphic withdrawal of an offer received in such office by telephone from the receiving telegraph office not later than the exact date and time set for receipt of proposals shall be considered. However, the telephone message shall be confirmed by the telegraph company by sending a copy of the written telegram that formed the basis for the telephone call. The written telegram shall be sealed in an envelope by a proper official and sent to the office designated in the RFP for receipt of offers. The official shall write on the envelope (1) the date and time of receipt and by whom, and (2) the number of the RFP, and shall sign the envelope. The offeror is responsible to inform the telegraph company of these requirements. No one from this office will be dispatched to the local telegraph office to pick up any telegram for any reason.

5. FACSIMILE OFFERS

Facsimile offers, modifications thereto, or cancellations of offers will not be accepted.

- 6. PROPOSAL SUBMISSION REQUIREMENTS AND INSTRUCTIONS
- a. REQUIREMENT FOR SEPARATE PRICE AND TECHNICAL PROPOSALS.
- (1) Each Offeror must submit both a Price Proposal and a Technical Proposal. The Price Proposal and the Technical Proposal must be submitted as separate volumes. Ensure that the outside of each separate volume is clearly marked to indicate its contents; and the identity of the offeror. Additionally, clearly identify the "original" cost/price proposal and the "original" technical proposal on the outside cover.
- (2) Both the Price Proposal and the Technical Proposal must be received by the closing date and time set for receipt of proposals.
- (3) No dollar amounts from the Price Proposal are to be included in the Technical Proposal.
- (4) All information intended to be evaluated as part of the Technical Proposal must be submitted as part of the Technical Proposal. Do not cross-reference similar material in the Price Proposal,

or vice versa. Also, do not include links to websites in lieu of incorporating information into your proposal.

- (5) Do not include exceptions to the terms and conditions of the solicitation in either the technical or price proposal. Should the offer include any standard company terms and conditions that conflict with the terms and conditions of the solicitation, the offer may be determined "unacceptable" and thus ineligible for award. Should the offeror have any questions related to specific terms and conditions, these should be resolved prior to submission of the offer. Notwithstanding the above, the Offeror must clearly
- describe in the Proposal Cover Sheet submitted with the Price Proposal any exceptions to the contractual and/or technical terms and conditions of the solicitation contained in the Offer.
- b. DISCUSSIONS. The Government does not intend to enter into discussions with offerors prior to determining those contractors within the competitive range, in accordance with FAR 52.215-1, Instructions to Offerors—Competitive Acquisitions, Alternate I.
- c. COST OR PRICING DATA. Offerors are not required to submit Cost or Pricing Data with their offers.
- d. GENERAL INSTRUCTIONS.
- (1) Submit only the hard-copy paper documents and the electronic files specifically authorized and/or required elsewhere in this section. Do not submit excess information, to include audiovisual materials, electronic media, etc.
- (2) Use only 8 ½ by 11 inch paper for hard copy submissions, unless another paper size is specifically authorized elsewhere in this section for a particular submission. Do not use fold-outs (e.g., 11" x 14" or 11" x 17" sheets) unless specifically authorized in this section for a particular submission. Do not use a font size smaller than 10, an unusual font style such as script, or condensed print for any submission. All page margins must be at least 1 inch wide, but may include headers and footers.
- (3) The preferred method for assembling your proposals is to use three-ring binders; however, the use of pressboard or other report covers with compression or other type fasteners is acceptable. Do not use spring clamps or exceed the recommended capacity of the fastener or binder. Do not use plastic multi-hole/spiral binding systems, heat binding systems, or other systems which do not facilitate the ready insertion of additional pages.
- (4) "Confidential" projects cannot be submitted to demonstrate capability unless all of the information required for evaluation as specified herein can be provided to the Government as part of the Offeror's technical proposal. Offerors that include in their proposals information that they do not want disclosed to the public for any purpose, or used by the Government except for evaluation purposes, must be clearly marked in accordance with the instructions at FAR 52.215-
- 1, "Instructions to Offerors— Competitive Acquisition", paragraph (e), "Restriction on disclosure and use of data".
- (5) In the case of an Offeror that is part of a large, multi-segmented business concern, provide information directly pertaining to the specific segment of the business concern (i.e., the division, group, unit, etc.) that will perform work under the prospective contract.
- (6) For submissions with page limitations, the pages will be counted as follows: One side of the paper is one page; information on both the back and front of one sheet of paper will be counted as two pages. Where authorized, fold-out pages (11" x 14" or 11" x 17") will count as one page. Pages furnished for organizational purposes only, such as a "Table of Contents" or divider tabs, are not included in the page limitation.

e. SPECIFIC INSTRUCTIONS FOR THE PRICE PROPOSAL

- (1) Number of Sets of the Price Proposal. Submit the ORIGINAL and ONE additional hard copy sets of the Price Proposal.
- (2) Size Restrictions and Page Limits. Use only 8 ½" x 11" pages. There are no page limits set for the price proposal. However, limit your response to information required by this solicitation. Excess information will not be considered in the Government's evaluation.
- (3) Format and Contents of the Price Proposal and List of Tabs. The Price Proposal shall be appropriately labeled as such and shall be organized as indicated in the following chart. Note: If the Offeror is not required to submit any information under a listed Tab in accordance with the instructions below, that tab can be omitted. However, do not renumber the subsequent tabs.

TAB CONTENTS OF THE PRICE PROPOSAL

- #1 The Proposal Cover Sheet
- #2 The SF 1442 and Acknowledgement of Amendments
- #3 Section 00010, Pricing Schedule
- #4 Representations, Certifications, and Other Statements of Offerors
- #5 JV Agreement, if applicable.
- (4) Detailed Submission Instructions for the Price Proposal
- TAB 1: The proposal cover sheet is required by FAR 52.215-1(2) (c) (i)-(v) and must be submitted by all offerors. This provision, titled "Instructions to Offerors—Competitive Acquisition," and the format for the proposal cover sheet are furnished elsewhere in this section.
- TAB 2: The SF 1442, Solicitation, Offer, and Award is to be completed by all Offerors and duly executed with an original signature by an official authorized to bind the company in accordance with FAR 4.102. Any and all amendments must be acknowledged by all Offerors in accordance with the instructions on the Standard Form 30, Amendment of Solicitation.
- TAB 3: Section 00010 is to be completed in its entirety by all Offerors. See Sections 00010 with attached notes, for further instructions.
- TAB 4: All Offerors must have electronically completed the annual representations and certifications on the "Online Representations and Certifications Application" (ORCA) website or respond with the completed representations / certifications found in the solicitation. The offerors are responsible for ensuring that these on-line Representations and Certifications are updated as necessary to reflect changes, but at least annually to ensure that they are kept current, accurate and complete. Additionally, the offeror must also complete and return the "Representations, Certifications, and Other Statements of Offerors" included in the solicitation. If the offeror is a Joint Venture, all participants must separately complete both the ORCA Representations and Certifications.
- TAB 5: If the Offeror is a Joint Venture (JV), include a copy of the JV Agreement. If a JV Agreement has not yet been finalized/approved, indicate its status. JV Agreements must clearly indicate the percentages of the JV participants, in particular the percent of the controlling party, and a clear delineation of responsibilities and authorities between the JV parties.

f. SPECIFIC INSTRUCTIONS FOR THE TECHNICAL PROPOSAL

- (1) Number of Sets of the Technical Proposal. Submit the ORIGINAL and TWO (2) additional sets of the written Technical Proposal, with each set separately packaged.
- (2) Format and Contents of the Technical Proposal and List of Tabs. The original and all copies of the technical proposal will be appropriately labeled as such. Each set shall be organized using the tabs specified in the following chart. Note: The main tabs directly correlate to the evaluation factors identified in Section 00120.

TAB CONTENTS OF THE TECHNICAL PROPOSAL

Factor #1 EXPERIENCE Factor #2 PERSONNEL

Factor #3 PAST PERFORMANCE

- (3) Page Limitations. See paragraphs 6.d.(2) and 6.d.(6) above for format and page count instructions. The following page limitations are established for each factor described above:
- . Factor #1, Experience Limited to 5 pages (maximum of 5 forms)
- . Factor #2, Personnel Limited to 1 page for each resume provided
- . Factor #3, Past Performance No page limitation

Tables of content, proposal cover letters, and tabs between proposal information do not count toward any page limitations in the proposal.

- (4) Detailed Submission Requirements for the Technical Proposal. The following is a detailed description of the information to be submitted under each TAB.
- (i) TAB 1: FACTOR 1, EXPERIENCE: Demonstrate the experience of the offeror and/or the proposed team, including sub-contractors, on projects same/similar to that described in the solicitation for same/similar construction work. The projects submitted should also demonstrate that the offeror and/or the team have performed a same/similar type of construction at multiple sites simultaneously.

The Contractor shall complete a minimum of three (3), but no more than five (5), "Experience Information" forms, attached at the end of this section, in response to this factor. All blocks must be filled in and all data should be accurate, current, and complete. All projects submitted must have been underway or completed within the last 3 years. At least two (2) of the projects provided must be valued at over \$3,000,000.

If any of the information required is not included in the form then the contractor will be considered non-responsive and evaluated as unacceptable.

(ii) TAB 2: FACTOR 2, PERSONNEL: The offeror must provide resume data for the following key personnel: Project Manager – Design, Project Manager - Construction, Safety Officer, Quality Control Manager, Senior Engineer, and Construction Superintendent. Resume information to be provided shall be limited to no more than one (1) page per person and shall include the following information as a minimum:

- . Name and title
- . Project assignment
- . Name of firm with which associated
- . Years experience with this firm and with other firms
- . Education degree(s), year, specialization, if applicable
- . Active professional registration, year first registered, if applicable
- . Other experience and qualifications relevant to same/similar work required under this contract. All key personnel shall have a degree in the field of work governed by the position they are assigned to and a minimum of five (5) years of professional experience in their field. For example, a Civil Engineer must have a degree in Civil Engineering and 5 years of professional civil engineering experience.
- (iii) TAB 3: FACTOR 3, PAST PERFORMANCE: For the projects listed under Factor 1 Experience, provide letters of recommendations, commendations and/or awards. The Contractor Performance Assessment Reporting System (to include ACASS, CCASS, and CPARS) will be utilized to validate past performance ratings on Department of Defense contracts, as well as any other past performance information the Government deems necessary to evaluate a contractor's past performance. The Government may contact references provided as part of Factor 1 Experience for information regarding the offeror's past performance on the project and for the purposes of assessing and verifying the scope of the work performed. Offerors should provide accurate, current, and complete contact information for references provided in the project descriptions.

7. Proposal Cover Sheet PROPOSAL COVER SHEET

- 1. Solicitation Number:
- 2. The name, address, and telephone and facsimile numbers of the Offeror (and electronic address if available):
- 3. A statement specifying the extent of agreement with all terms, conditions, and provisions included in the solicitation and agreement to furnish any or all items upon which prices are offered at the price set opposite each item. Statement to include any exceptions in technical or cost/price proposal or exceptions inherent in Offeror's standard terms and conditions.
- 4. Names, titles, and telephone and facsimile numbers (and electronic addresses if available) of persons authorized to negotiate on the Offeror's behalf with the Government in connection with this solicitation:
- 5. Name, title, and signature of person authorized to sign the proposal. Proposals signed by an agent shall be accompanied by evidence of that agent's authority, unless that evidence has been previously furnished to the issuing office.
- 8. SOURCE SELECTION USING THE LOW-PRICED, TECHNICALLY ACCEPTABLE PROCESS. An evaluation for acceptability will be performance on each proposal in accordance with FAR 15.101-2(b)(3). The proposal that provides the lowest price and is otherwise technically acceptable in all factors will be selected for award. To be considered technically acceptable, no technical factor in the proposal may be determined to be unacceptable. The failure

of a proposal to meet any of the factors will result in a technically unacceptable rating and preclude award. See also Section 00120.

EXPERIENCE INFORMATION

(To be completed by Contractor)

1. Contractor:

Name:

Address:

- 2. Contract /Task Order(TO) /Purchase Order (PO) Number:
- 3. Contract/TO/PO Dollar Value:
- 4. Contract/TO /PO Status: Active Complete

Completion Date (w/ extensions):

5. Project Title:

Location:

- 6. Project Description:
- 7. Project Owner or Project Manager for the Client provide:

Name:

Address:

Telephone Number and E-mail:

SECTION 00800 - SPECIAL CONTRACT REQUIREMENTS

The following have been added by full text:

<u>SPECIAL CONTRACT REQUIREMENTS</u>
SECTION 01010

SCOPE OF WORK

- 1.0 GENERAL
- 1.1 The project consists of design and construction of one range complex with 8 new ranges, and related roads and support facilities for the Afghanistan National Army at Camp Gamberi Afghanistan. Contractor shall use Government furnished 90% designs provided in Appendices A through U to complete design and construction documents and construct these facilities. The standard designs for the Bleachers, Latrine, Open Mess, and the Observation Tower will be provided on a separate CD.
- 1.1.1 The project is defined as design, material, labor, and equipment to construct the following buildings, parking, utilities, and other infrastructure: observation towers, covered mess areas, water well with pumping station and non-potable water system with non-potable water storage tank, latrine facilities with sewer collection system, graveled road, sidewalks and parking, classroom, weapon breakdown and ammo distribution building, security detail office building, utility storage building, covered bleachers, guard shack, and optional lighting and fencing to control and protect range support facilities.
- 1.1.2 Additional overall requirements include earthwork to build erosion control structures, construct and mark berms, and provide electric power. The contractor shall provide and install targets for all ranges. The contractor shall fill and grade the pistol, rifle, and machine gun ranges. The grading for the full area of the pistol, rifle, and machine

gun ranges, and backstop berm construction shall be completed only after the final phase of the demining is completed. The contractor shall construct all the berms and areas to be filled with material located onsite.

- 1.1.3 The Contractor shall indicate in design any proposed areas for future expansion.
- 1.1.4 Design and construct site grading including drainage structures within the marked area demined, approximately 2 kilometers by 110 meters. Once the demining contractor has cleared the additional full areas for the pistol, rifle and machine gun ranges, the construction contractor may grade the full area of the ranges. All demining work should be completed in February 2009.
- 1.1.5 Contractor shall plan to run utilities from 5 meters beyond the edge of roadway for an average of 60 meters for each new building. Ties to existing buildings shall be closer to existing connections. Exact distances shall be verified by Contractor during design.
- 1.1.6 Include demolition of any existing facilities or related man made features and debris that interfere with work under the project, or which would create a hazard or interfere with the completion of this portion of the work
- 1.1.7 Existing Utilities that are located in the footprint of new buildings shall be relocated to route around the buildings.
- 1.1.8 For clarity in this document, unless a specific industry standard is specified, United States of America design, construction and material standards shall be used.
- 1.1.9 Work within this contract shall meet and be constructed in accordance with current U.S. design and International Building Codes (IBC), Life Safety Codes (NFPA-101), and Force Protection and security standards. A partial listing of references is:

IBC, International Building Codes 2003 NFPA 101, Life Safety Codes UFC 4-010-01, DoD Minimum Anti-Terrorism Standards for Buildings.

1.2 ENGLISH LANGUAGE REQUIREMENT

All information shall be presented in English. The Contractor shall have a minimum of one English-speaking representative to communicate with the COR at all times when work is in progress.

1.3 SUBMITTALS

Submittals and a Submittal Register are required as specified in Section 01335 of the Basic Contract.

1.4 CQM TRAINING REQUIREMENT

Before project design and construction begin, the Contractor's Quality Control Manager is required to have completed the U.S. Army Corps of Engineers CQM course, or equivalent. The Construction Trades Training Center (CTTC) in Jalalabad, Afghanistan provides a course that satisfies the requirement. Courses are offered at regular intervals. For enrollment and course information, contact Reed B. Freeman at the following:

Reed B. Freeman, PhD, PE Quality Assurance Branch Afghanistan Engineer District, USACE Email: ree.b.freeman@usace.army.mil

Telephone: 079-760-4396

A copy of the course completion certificate shall be included in the Design Analysis submittal.

2.0 LOCATION

ANA Brigade Training Area Site Locations by Coordinates. Refer to maps with coordinates in Appendix I. The site latitude and longitude coordinates are provided in the rights of Entry for Each Range Complex.

Proposed Range Complex Area Coordinates for 201th 3rd Brigade (Jalalabad)

```
01. E70.34142
               N34.60185
02. E70.43995
               N34.60335
03. E70.4613
               N34.59402
04. E70.46283
               N34.58812
05. E70.49345
               N34.56783
06. E70.48808
               N34.53397
07. E70.46913
               N34.53333
08. E70.39047
               N34.52552
09. E70.37902
               N34.52602
10. E70.35113
               N34.52692
11. E70.3403
               N34.53237
12. E70.31858
               N34.5416
13. E70.30803
               N34.55992
14. E70.31603
               N34.58135
15. E70.33045
               N34.5864
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3.0 UNEXPLODED ORDNANCE (UXO) REMOVAL AND CLEARANCE

Demining and clearance will be performed by other firms in a phased sequence. After demining the UNMACA Certificates will be provided to contractor which will have the coordinates of cleared area. It is the responsibility of the Contractor to be aware of the risk of encountering UXO or mines and to take all actions necessary to assure a safe work area to perform the requirements of this contract. The Contractor assumes the risk of any and all personal injury, property damage or other liability arising out of or resulting from any Contractor action taken hereunder. The Contractor and its subcontractors may not handle, work with, move, transport, render safe, or disarm any UXO or mine, unless they have appropriate accreditations from the UNMACA MAC.

If a UXO or mine is encountered after a MAC-approved clearance certificate is provided to the Government, UXO or mine disposal shall be handled in accordance with Section 01015, Technical Requirements.

4.0 SUMMARY OF WORK

4.1 CONTRACTOR REQUIREMENTS

The contractor shall design and construct the facilities as a design-built contract and shall be in accordance with the requirements stated in Section 01015: Technical Requirements. Refer to attached appendices and standard drawings for more specifics for required spaces. Design and construction work shall include but not be limited to that shown within attached tables and described below.

4.1.1 General Requirements for Facilities

All requirements set forth in the Section 01010 Scope of Work, but not included in the Section 01015 Technical Requirements, shall be considered as set forth in both, and vice versa. Provide heating for all indoor facilities unless otherwise stated in sections 1010 or 1015. All toilets shall be eastern style. All eastern-style toilets shall face North or South.

All standard construction amenities and details such as heating, lighting, site drainage, utility connections, etc. shall be implied as a design and construction requirement. Drawings referenced are contained in Section 01015 or Appendices. Gravel walkways shall connect all buildings, facilities, and features such as parking lots, generator pads, etc.

In general, this project consists of designing and constructing of the following:

4.1.2 Base Bid Infrastructure

Observation Tower with safety flagpole at each range (8 per range complex)--- The observation tower will measure 4.8m2, stand approximately 7m high, and be located approximately 15m behind the firing line in the center of each range. Provide appropriately sized power for intended load capacity. See Appendix A and standard design CD.

Ammunition Distribution Building (1 at each range complex). At each live fire range, design and construct a 3.8m x 6.1m structure on a reinforced concrete pad consisting of a 3m x 3.6m ammunition room and a 3.1m x 3.8m covered patio area. The ammunition room shall be constructed of reinforced CMU block walls with a continuous bond beam and have one steel entry door and two service windows with steel shutters. One service window shall face the patio area and the other shall open on the opposite side away from the patio.

Covered Mess at each range (8 per range complex). The structure provides an area for troop messing at the range site. This facility is also used as a weapons cleaning area by troops using the range. The covered facility has a concrete floor and a standing seam metal roof supported on columns and wood framing system. Sides will be left open. Stand-up eating tables and serving tables will be provided by contractor. Provide appropriately sized power and lighting for intended load capacity.

Security Detail Office Building: Security Detail Office Building large enough for 20 personnel. Provide appropriately sized HVAC and power for intended load capacity.

Guard Shack: Guard Shack large enough for 3-4 personnel and equipment at the entrance to the range complex. Provide appropriately sized HVAC and power for intended load capacity.

Utility Storage Building: Utility Storage Building with site power generator and fuel storage tank. The fuel storage tank shall have capacity for 1 week's at full operation. The site shall be secured. The building will be a minimum size of 8mx8m, and located near the other range support buildings.

Water Well-- Water well, water pump and water storage & treatment (20,000 liters) for washing (no showers), latrine and cleaning.

Permanent latrine facilities—Permanent latrine facilities with 10 eastern toilets with hose bibs, and at least one outside fresh water and weather proof spigot. Provide 3 latrines for the range complex along the rear of the range complex.

Covered bleachers--- Covered bleachers, one per range, capable of containing 50 personnel at one time, facing down range behind the observation tower, offset left or right.

Sanitary and Septic system-- Design and construct sewer lines, septic tank, and absorption field. A soil investigation will be necessary to determine size and depth of absorption field.

Parking Area--Graded aggregate base material vehicle parking lot 50m x 50m, placed between the classroom and the nearest ammunition distribution building.

Entrance Road--Graded gravel road from the entrance of the range to the last (8th) range, estimated 17,500 SM.

Fencing-- Fencing around range complex (minimum length required to control and protect range support facilities);

Erosion control structures (drainage ditches, pipe culverts, washes, and small bridges as required).

Additional Overall Requirements

The firing lines for the machine gun range shall consist of a 1.25m high berm with a 2m plateau on top that is centered on and extend along the entire length of the zero meter line. The side of the berm shall be cut at a 1:2 slope with walk-in fighting positions so the front end of the fighting position is at the zero meter line. One meter wide steps made of concrete, mortared rock or timbers shall be placed into the side of the berm centered on the right firing lane limit of odd numbered lanes.

Boundary markers will be placed on each range to mark right and left limits.

Dirt berms will be constructed as backstops, as needed.

4.1.3 Base Bid - Design, layout, and construct the following training ranges

- One (1) Rifle Range: 25 shooting lanes (3m between firing positions) using the "300 meter known distance Range, with 25 KD 120 targets with bang board" as a general model in the Army's range manual, TC 25-8 (need 3m between positions). Contractor shall clear; level and grade smooth the range site. Dig out target line to keep level with firing positions (see side view of target line- attachment). Construct concrete retaining walls at the excavated target line. A dirt berm will be constructed as the "back-stop" of the range. Approximate range area: 75m (width) x 300m (length).
- o Number of targets, and distance from firing points. 25, on target line, see Appendix J.
- o Type of targets will be the rail system. See Appendix J.
- o Firing points will be as laid out on range plan. See Appendix N.
- o In front of each target there will be a 50 mm x 100 mm slot to insert a target on a stick.
- One (1) Pistol Range: 5 shooting lanes (8m between firing positions) using the "Combat Pistol Qualification Course" as a model in the Army's range manual, TC 25-8. Firing position markers will also be placed every 2m (a total of 22/23) to accommodate for alternate range configuration when needed. PVC target stands (request no concrete foundation), for the 22/23-position configuration, shall be placed at 10 meters and 25 meters. Contractor shall clear, level and grade smooth the range site. A dirt berm will be constructed as the "back-stop" of the range. Approximate range area: 45m (width) x 80m (length). Boundary markers will be placed on each range to mark right and left limits.
- One (1) Heavy Machine Gun Range: 5 firing positions using the "Automated Sniper Field Fire Range" as an approximation in the Army's range manual, TC 25-8. Targets will be placed by ANA personnel. Contractor shall clear; level and grade smooth the range site. A dirt berm will be constructed as the "back-stop" of the range. Range area: Width = as small an area as possible (area may "fan out" from firing positions to targetry to minimize range firing position "footprint"); Length = 1,000m. Boundary markers will be placed on each range to mark right and left limits. The firing lines shall consist of a 1.25m high berm with a 2m plateau on top which is centered on the zero meter line.

- One (1) RPG/SPG Range: Five (5), 10-meter wide firing positions. Targets will be placed by ANA personnel. Soil berms will separate firing lanes. A soil berm will also be constructed as the "back-stop" of the range. Approximate range area: 50m (width) x 1000m (length). The soil berm width will also need to be accounted for in total range width. Boundary markers will be placed on each range to mark right and left limits.
- One (1) Mortar Range: Five (5) firing position mortar range. Targets will be placed in the impact area by ANA personnel. Range area: Width = based on safety evaluation (area may "fan out" from firing positions to targets to minimize range "footprint"); Length = approximately 2,000m.
- One (1) Hand Grenade Familiarization Range: Four (4) throwing bays using the "Hand Grenade Familiarization Range" as a model in the Army's range manual, TC 25-8. Targets will be placed by ANA personnel. Approximate range area: 100m (width) x 50m (length). Boundary markers will be placed on each range to mark right and left limits
- One (1) Fire and Movement Range: Two (2) movement lanes using the "Fire and Movement Range" (Figure D-29) as a model in the U.S. Army's Range Manual, TC 2-8. Targets will be placed by ANA personnel. Approximate range area: 150m x 150m. Boundary markers will be placed on each range to mark right and left limits
- One (1) Urban Combat Area: Three lane course using the "Urban Assault Course" (Figure D-21) model in the U.S. Army's Range Manual, TC 2-8. Do not construct Stations 4 and 5. Place dirt berm 75m behind, and perpendicular to, the 4 dirt berms that make up the course lanes. This dirt berm will run the width of the entire course, and will extend at least 10m past the 2 dirt berms that mark the left and right perimeters of the course. Targets will be placed by ANA personnel. One dirt berm will also be constructed as the "back-stop" (perpendicular to the firing lane berms) of the maneuver area. Range Area: Approximately 150m (width) x 200m (length).
- One (1) Un-Exploded Ordnance and Demolition pit or area. This area will be used to dispose of unexploded ordinance (UXO). The area shall be a circular area with a diameter of at least 50 meters and be surrounded with a 5 meter high berm. The pit area shall have one access road into the area through the berm on the down range side. There shall be a missile proof shelter located outside the berm to provide shelter for the soldiers during detonations. See Appendix P for details.
- 5. Option Items –
- 5.1.1 Graded gravel main road to the range facilities from the ANA garrison, estimated quantity 10,000 SM.
- 5.1.2 Graded gravel road from last (8th) range around the perimeter of the range complex, estimated quantity 50,000 SM.
- 5.1.3 Lighting on roads to ranges, mess areas, latrines, buildings, and towers, and between the fence and road surrounding the entire range complex (Lump Sum quantity).
- 5.1.4 Provide and install chlorination system to provide non-potable water in accordance with the provisions of Section 1015.

- 5.1.5 Provide and install electrical utility connection to the Afghanistan National Army Garrison at Camp Gamberi in accordance with the provisions of Section 01015.
- 5.1.6 Infantry Squad Battle Course (ISBC): The ISBC will be located as directed by the Contract Officer Representative (COR) in conjunction with the ARSIC engineer to ensure an adequate safety zone. The ISBC range will include a one meter high by 200 meter long berm at the range entrance and a two meter high by 200 meter long berm one KM from the entrance with metal signs (two meter by two meter at each end of the berm) mounted on top of the two meter berm with appropriate markings to identify the ISBC range limit. The ISBC range shall also include a covered mess and an observation tower equivalent to the covered mess and the observation towers to be constructed at the base bid ranges.
- 5.1.7 Classroom Provide one concrete masonry unit or 3D Panel building of about 8m X 28m X 3.75 m high. The contractor shall provide the foundation, floor slab, electrical, mechanical, and related items for a functional facility. The building shall have ceiling, floor and wall insulation, interior wall finishes, windows with interior blinds, two interior office/storage areas 3m X 4.2m with a 3 meter ceiling height. Building lighting design shall allow for flexible set up and use of the main room. Provide ceiling fans and electric resistance fan type heating units. The main room shall be provided with a lecture area on one end and shall be designed to accommodate large group training or several small group activities. Provide building with water for janitorial use inside the building. Provide a minimum of two weather proof, freeze-proof hose bibs with concrete slabs outside the building. Protect hose bibs by four bollards. Contractor shall raise two existing communication and one electrical manhole to finished floor level and install new trap-door style covers to provide access.

The structure shall be constructed of reinforced CMU block or 3D Panel. If CMU walls are constructed, the walls shall have a continuous bond beam at the top and vertical reinforcement to meet seismic requirements. The exterior walls shall be finished with stucco, and the interior walls shall be plastered. The contractor shall paint the exterior and interior walls surfaces. The ceiling construction material will be subject to the approval of the COR. Windows shall be insulated pre-finished aluminum with a thermal break frame and sash. All doors shall be commercial solid core exterior grade in metal frames. Hardware shall be heavy duty and match the door use. The floor slab shall be a reinforced concrete slab with a grade beam to meet seismic requirements. Floor foundation and slab shall be designed based on geotechnical investigation by the Contractor. The roof structure shall be steel with metal roofing panels that are continuous from the ridge to the eave. The roof slope shall be at least 4:12.

The main room of the classroom facility shall be capable of holding 50 soldiers seated. Contractor shall provide a lockable office and storage room. The concrete floor shall be sealed or surfaced to protect the surface and to control dust. The general lighting shall be a system of light of which half can be turned off for lecture classes. The lighting over the speaker area shall be controlled separately from the general lighting.

6.0 PROJECT INFRASTRUCTURE REQUIREMENTS

6.1 SITE PLANNING

The Contractor shall prepare a site boundary survey and site plan based on information contained in the Request for Proposal. The development of the master plan will include participation in several design charettes conducted at the Afghanistan Engineer District Headquarters Office in Kabul. Contractor shall verify all space requirements and code compliance in accordance with sections 1010 and 1015 of this contract. The final layout of the ranges and support facilities will be determined at the design charette, after the demining is complete for the entire area within the boundary, as well as the range road and surrounding area for the firing pits and support facilities.

The site coordinates of the range firing pits, range road, and range support facilities shall be provided by the COR after the area has been demined by the UXO Contractor. The individual range orientation and siting shall be adjusted during the charettes to ensure safety clearances, and to maintain the safety fans within the ROE (Right Of Entry).

6.2 DEMOLITION AND GRADING

6.2.1 Minor Site Demolition

Minor site demolition is required prior to construction of new work. Grading at the site is required and shall conform to requirements within references herein.

6.2.2 Crushed Stone

Native crushed stone 100 mm thick shall be placed around all buildings, from the building wall or building landscaping out 2m and all areas of anticipated foot or vehicle traffic to reduce erosion and to provide dust control. Graded, aggregate paved walkways shall be installed between buildings and parking areas.

6.3 WATER SYSTEM

6.3.1 Non-potable Water

Design a non-potable Water System (WS), to include a groundwater well protected in an enclosed, heated water well house as a source for water, and to deliver the water, a hydro-pneumatic water storage tank, booster pumps, and underground pipe distribution network system. The WS shall be constructed to deliver a minimum 345-414 kPa (50-60 psi) at a flow rate that is twice the required daily demand. Water use rate shall be based on ANA daily field training camp conditions or approximately 25 gallons per capita day.

6.3.2 Storage Tanks

Non-potable water storage tanks shall provide capacity for a minimum of 100 percent of the required daily demand. The ground storage tank (no elevated tanks) and distribution system shall be designed to provide a minimum 276 kPa (40 psi) at ground level at all points in the delivery system. Minimum pressures of 207 kPa (30 psi) under peak domestic flow conditions can be tolerated in isolated areas, as long as all peak flow requirements in the entire system can be satisfied. Maximum water pressures in distribution mains and service lines shall not exceed 517 kPa (75 psi) at ground elevation. Water demand required for fire fighting and for irrigation and landscaping needs shall not be included in design demand calculations.

6.3.3 Availability

It is acknowledged that water may not be available at the site despite contractor good faith efforts to find it. The Contractor shall drill a minimum of two wells; each well shall be capable of 2,800 gpd, at the site to a minimum depth of 400 feet (122m). If this is done without result, the Contractor will be considered to have fulfilled the terms of the contract and will be entitled to the full price of the contract CLIN for well drilling. However, the Contractor must still furnish all other parts of the water distribution system as described in section 01015 of the specifications.

6.3.4 Dry Wells

Dry wells must be de-commissioned in accordance with ASTM D 5299. The Contractor must submit a written plan for de-commissioning wells.

6.4 SANITARY SEWER SYSTEM

6.4.1 Design & Construction

The sanitary sewer collection and treatment system shall be designed and constructed by the Contractor. The sanitary sewer collection system shall consist of gravity sewer pipe network and accessories such as manholes,

cleanouts, and building service connections. Conduct surface terrain (sloping) and a soils investigation necessary to design and construct a septic tank and absorption field.

6.4.2 Population

The sanitary sewer system shall be designed to accommodate the total expected daily training population plus 25% as specified in the Scope of Work and verified by the Contractor. The population is estimated at a Company level strength of 100 men plus a training staff of 12, for a total of 112 men.

6.4.3 Geotechnical

Geotechnical investigation of the proposed sewage treatment site is required and the contractor shall design the sewage treatment system to be compatible with site and soil conditions.

6.4.4 Capacity

System capacity shall be calculated based on a hydraulic waste load equivalent to 80 percent of the water usage rate of 25 gallons or 95L per capita day, or 76L per capita day.

6.4.5 Gravity Collection System

The gravity sewer collection system shall connect to a septic tank absorption field effluent disposal system.

6.4.5.1 Site Survey

The Contractor shall conduct a topographic survey to determine existing site characteristics. The Contractor shall conduct a utility survey to determine the locations of any nearby water lines, wells, sanitary sewers, storm sewers and electrical lines.

6.4.5.2 Percolation Testing

At proposed sites for holding ponds and the absorption field, the Contractor shall perform percolation tests. Percolation testing may be carried out with a shovel, posthole digger, solid auger or other appropriate digging instruments. Percolation tests shall be accomplished uniformly throughout the area where the absorption field is to be located. Percolation tests determine the acceptability of the site and serve as the basis of design for the liquid absorption. Test results for soil will determine the number of minutes required for water to drop a distance of 25mm, and results shall be provided in units of m2/liters/day.

6.4.5.3 Sanitary System Layout

The Contactor shall design a sanitary system layout following requirements of Section 01015 this contract. Pipe, fittings, and connections shall conform to the respective specifications and other requirements as listed in Contract Section 01015 and all its referenced codes.

6.4.6 Septic System Design

The Contractor shall design a septic tank and absorption field system including all tank geometry, hydraulic loading, inlet and outlet configurations, number of compartments and related site preparation and earthwork. Design will be per specifications provided in Section 01015.

6.4.6.1 Location of Central Septic Tank

Septic tank shall be provided and installed underground and positioned at a location easily accessible to pumping trucks. The Contractor shall provide protection for the septic system by ensuring that vehicles, material storage, and future expansion shall be kept away from the area. Signage or other prevention methods (i.e. pipe bollards) shall be used to provide this protection. The finished grade for the site shall ensure that storm water runoff shall drain away from the site to prevent ponding, inflow, and infiltration

6.4.6.2 Septic Tank & Absorption Field

Design covers a septic tank & absorption field. However, if available real estate constrains construction of this facility, other engineering solutions shall be brought to the Contracting Officer for consideration and approval.

6.5 SITE ELECTRICAL DISTRIBUTION SYSTEM

The contractor shall design an electrical power system to supply and distribute power (to include back-up generation with fuel storage tank, and underground electrical distribution) to all facilities included in the contract to include master planned future facilities. If local electrical distribution system (utility) power is available, the contractor shall provide: 1) a connection to that system to utilize utility power as the prime source for the site; 2) generator(s) with fuel storage to provide a backup source for the site; and 3) an underground electrical distribution system. If local electrical utility power is not available, the contractor shall provide: 1) generators with fuel storage to provide power to the site as the prime source; and 2) an underground electrical distribution system. For details of the electrical power system see Section 01015: TECHNICAL REQUIREMENTS.

All electrical design and installation shall meet NEC (NFPA 70) requirements. Electrical receptacles shall be provided as indicated. Conductors and circuits shall be sized for the specific loads. Primary voltage shall be 220/380 V, 50 hertz.

The contractor shall provide all necessary materials and equipment including temporary power, as required, to provide power to the new classroom, weapon breakdown/ammo distribution building, security detail office building, guard shack, observation towers, covered mess areas, security perimeter, roads, parking areas, other common areas, and latrines.

If the local electrical distribution system is used, contractor shall be responsible for step down transformer and grounding from the closest distribution line.

6.6 LIGHTING (OPTION)

General lighting shall be provided as indicated (length of road, covered mess, tower, generator bldg, latrines, offices areas, and to the 50 M line) and shall meet recommendations from IESNA for each building type and function within each building. Design and installation shall meet NEC 70 requirements.

Exterior lighting shall be high intensity discharge luminaries on 10 meter high minimum galvanized steel poles.

6.7 ROAD NETWORK, SIDEWALK, AND PARKING

6.7.1 Design & Construction

The Contractor shall design and construct the entire road and parking network. The roads shall be designed to carry traffic of up to a 7 ton, three-axle vehicle. A storm drainage system shall also be included. The road layout shall provide access to range facilities to include observation towers and covered mess areas, classroom, ammunition breakout building, utility & storage building, security detail office building, guard shack, water well, pump house, and water tank, septic tank, and trash collection point. Provide parking areas for vehicles for the following facilities at the compound: Control towers, covered mess areas, well pumping station and storage tank, latrine facilities, classroom, weapon breakdown and ammo distribution building, and rear areas of individual ranges.

6.7.2 Technical Requirements

Road design shall be designed per Section 01015, Technical Requirements. Roadways and sidewalks are required as shown in Appendix L and shall be designed and constructed based upon recommendations from geotechnical analysis required herein.

6.7.3 Project Requirements

Design and construct approximately 11.5 km of 9m-wide roadway connecting the ANA Garrison Camp Gamberi to its range complex. Roads shall also be provided to connect the ranges and encircle the range complexes. The road from the main base to the range complex shall consist of a sub-base to be scarified, reshaped and compacted before placing the top layer, then a 200mm aggregate surface course with a 3% slope off the crown for drainage. The roads within the range complex shall require only a 150mm aggregate surface course. New roads shall include drains and grading as required. See Appendix L.

6.8 TRASH POINT

The Contractor shall design, in a location convenient for easy removal, a trash collection point. It shall be located near the range mess area. The trash point shall be a 1.8 m x 1.8 m concrete pad with a minimum 100mm thickness and with a 1.8 meter tall chain link fence around the perimeter. One side shall have a 1.2 m wide gate entrance. Trash Point shall have a metal roof covering.

6.9 HVAC, HEATING VENTILATION AIR CONDITIONING

Environmental control of the facilities shall be achieved by HVAC equipment proposed by the contractor and approved by the U.S. Government. See section 01015 for scope of work required.

6.10 LIFE SAFETY

Design and Construct circulation pathways and exit stairs in accordance with building code references herein. Fire sprinkler system is not required. The facility shall comply with all other safety requirements as required within references. Smoke detectors and fire alarm systems shall be installed in accordance with requirements herein.

6.11 FENCING AND BARRICADES

Fencing shall consist of the types shown or described herein. Barricades shall be as shown. Refer to drawings for required types and locations. Barricades are not intended to resist a certain horizontal load and are not required to be permanently anchored to ground.

6.12 FOUNDATION DESIGN

Foundations, including sub grade, shall be designed and constructed based on recommendations from the geotechnical investigation required herein.

7.0 COMPLETION OF WORK

All work required under this contract shall be completed within 365 calendar days including government review time from Notice to Proceed for site work. Site work construction will not be allowed to proceed until demining is complete. Liquidated damages in the amount of \$1976.65 shall be assessed for every calendar day beyond the scheduled contract completion date and charged to the Contractor.

8.0 SPARE PARTS

Contractor shall provide a list of spare parts to COR for approval.

9.0 REFERENCES

Refer to Section 01015 for required references.

☐ End of Section –

Appendices

Appendix A- Observation Tower

Appendix B- Covered Mess

Appendix C- Modified Qualifying Pistol Range

Appendix D- Layouts

Appendix E- Modified Automatic Weapons Range

Appendix F- Classroom

Appendix G- Throwing Bay

Appendix H- Target Photos

Appendix I- Jalalabad Topography

Appendix J- Target Line Dugout

Appendix K- Latrine

Appendix L- Road Cross Section Drawing

Appendix M- Zero Surface Danger Zone

Appendix N- Range Layout Presentation

Appendix O- Shooting Range Plan Layout

Appendix P- UAC Surface Danger Zone

Appendix Q- QCS Certificate

Appendix R- KDR 120 96

Appendix S- KD Target flyer

Appendix T- Range Clearance by Others

Appendix U- Guard Shack

(End of Summary of Changes)

